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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,952	02/25/2004	David A. Hill	BS00-073-D2	8434

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WITHERS & KEYS LLC
P O BOX 71355
MARIETTA, GA 30007-1355

EXAMINER

DINH, TRINH VO

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,952

Applicant(s)

HILL, DAVID A.

Examiner

Trinh Vo Dinh

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 01/06/05.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-41 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 22-41 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This is a response to the response filed January 06, 2005 regarding to the preliminary amendment filed February 25, 2004. Since the preliminary amendment was filed before a Non-final office action was mailed on 10/05/2004, this office action is hereby offered to replace the previous office action. The time for response has been restart for a period of 3 months from the date of the mailing this office action.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 22-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 22, 27 and 35, it is unclear what "donor" in phrase "donor antenna" means. Since no definition of the phrase is found either in claims or in the specification, the Examiner requires the Applicant defining the phrase in the specification or/and in claims.

In claim 32, "the fabric" has no antecedent basis since the recitation is not found in any claims which claim 32 depends on. However, an antecedent basis of the recitation is found in claim 30. The Examiner suggests changing claim 32 to depend on claim 30 instead of claim 28.

Claims 23-26, 28-31, 33-34 and 36-41 are rejected because they depend on rejected base claims 22, 17 and 35.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 27 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 or claim 9 of U.S. Patent No. 6,351,248 B1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed language "surrounding an antenna member of the donor antenna with a reflective member along a longitudinal axis of the antenna member" recited in claim 27 of the instant application is similar to the limitation "an antenna member having at least one member and a longitudinal axis, and a reflecting member surrounding the antenna member wherein the reflecting member is substantially continuous and extends along the longitudinal axis" recited in claim 1 or claim 9 of the U.S. Patent No. 6,351,248 B1.

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5. Claim 27 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 or claim 18 of U.S. Patent No. 6,724,350 B1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed language “surrounding an antenna member of the donor antenna with a reflective member along a longitudinal axis of the antenna member” recited in claim 27 of the instant application is similar to the limitation “an antenna member having at least one member and a longitudinal axis, and a reflecting member surrounding the antenna member wherein the reflecting member is substantially continuous and extends along the longitudinal axis” recited in claim 10 or claim 18 of the U.S. Patent No. 6,724,350 B1.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 27, as the best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by R. Redheffer (USP 2,624,843 of record).

With respect to claim 27, Redheffer discloses, in Fig. 1, an antenna member (6+7) of a donor antenna (6+7 +5) being surrounding with a reflecting member (9, col. 1 line 58 to col. 2 line 14, or col. 3, lines 45-47) along a longitudinal axis of the antenna member.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redheffer (US 2,624,843 of record) in view of Berube (USP 6,673,068).

Redheffer discloses every feature of the claimed invention except metallic mesh. Berube discloses reflecting member (66) comprising a copper mesh (col. 6, lines 30-40). It would have been obvious to one having ordinary skill in the art to make Redheffer's reflector member of copper mesh as taught by Berube, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended uses as a matter of obvious design choice.

10. Claims 28 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redheffer (US 2,624,843 of record) in view of Reynolds et al (USP 5,885,906).

With respect to claim 28, Redheffer discloses every feature of the claimed invention except metallic mesh. Reynolds discloses reflecting member (abstract) comprising a metallic mesh (col. 3, lines 49-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have Redheffer's reflector member made of metallic mesh as taught by Reynolds in order to reduce PIM as well as maintain high degree of RF reflectivity of the antenna reflector.

With respect to claim 30-31, Reynolds discloses the metallic mesh being wrapped by fiberglass fabric (col. 2, lines 5-15).

Allowable Subject Matter

11. Claims 22-26 and 35-41 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

12. Claims 32-34 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The cited art of record fails to teach a method for making a reflecting member of a donor antenna comprising steps of coating the fabric with a liquid resin, allowing the liquid resin to solidify then removing the mold as defined in claims 22, 32, 34 and 35.

Inquiry

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh Vo Dinh whose telephone number is (571) 272-1821. The examiner can normally be reached on Monday to Friday from 9:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

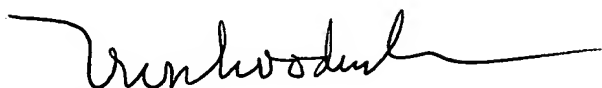
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Trinh Vo Dinh', with a long horizontal flourish extending to the right.

Trinh Vo Dinh
March 04, 2005